

FIG. 1

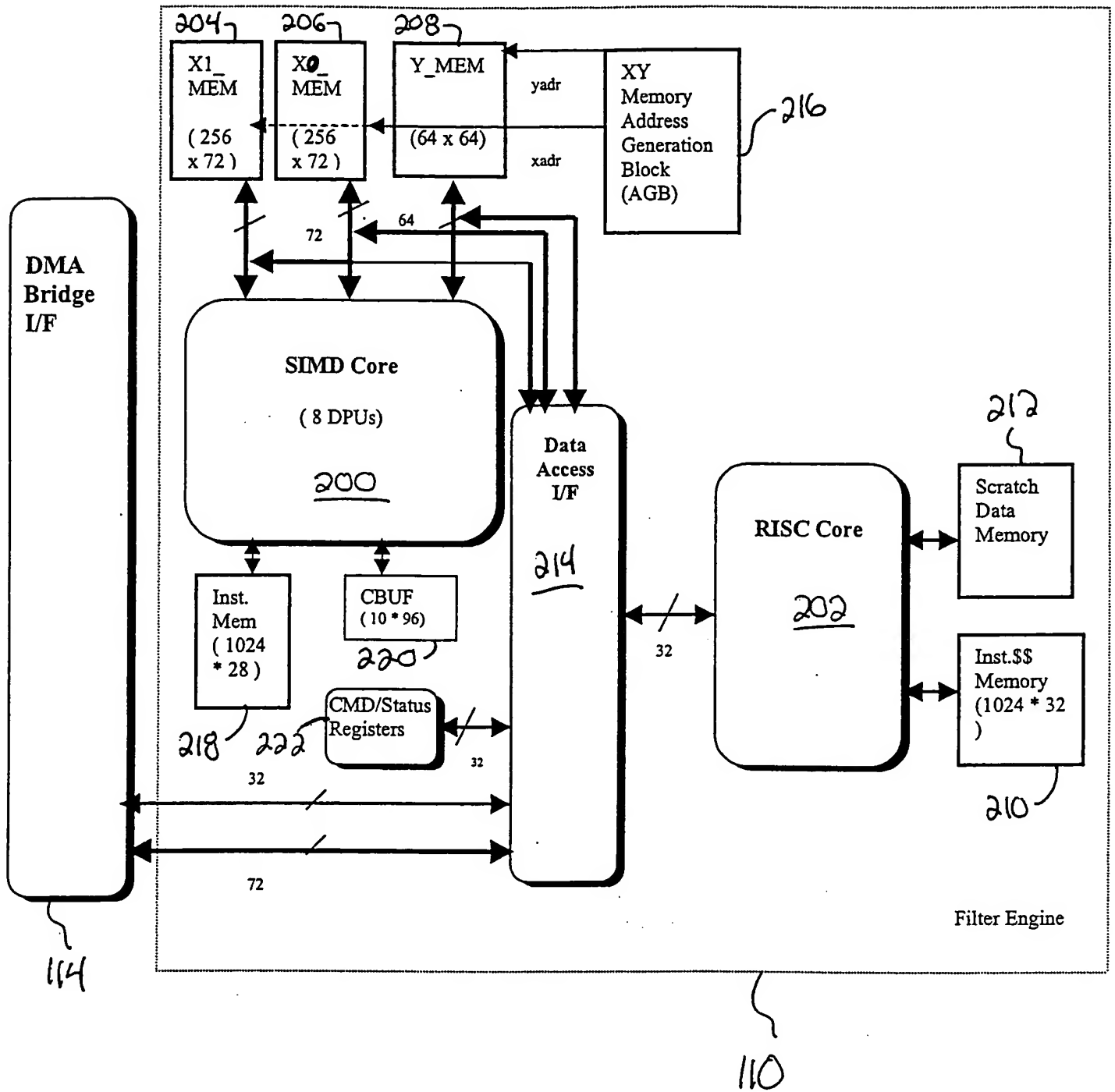


FIG. 2

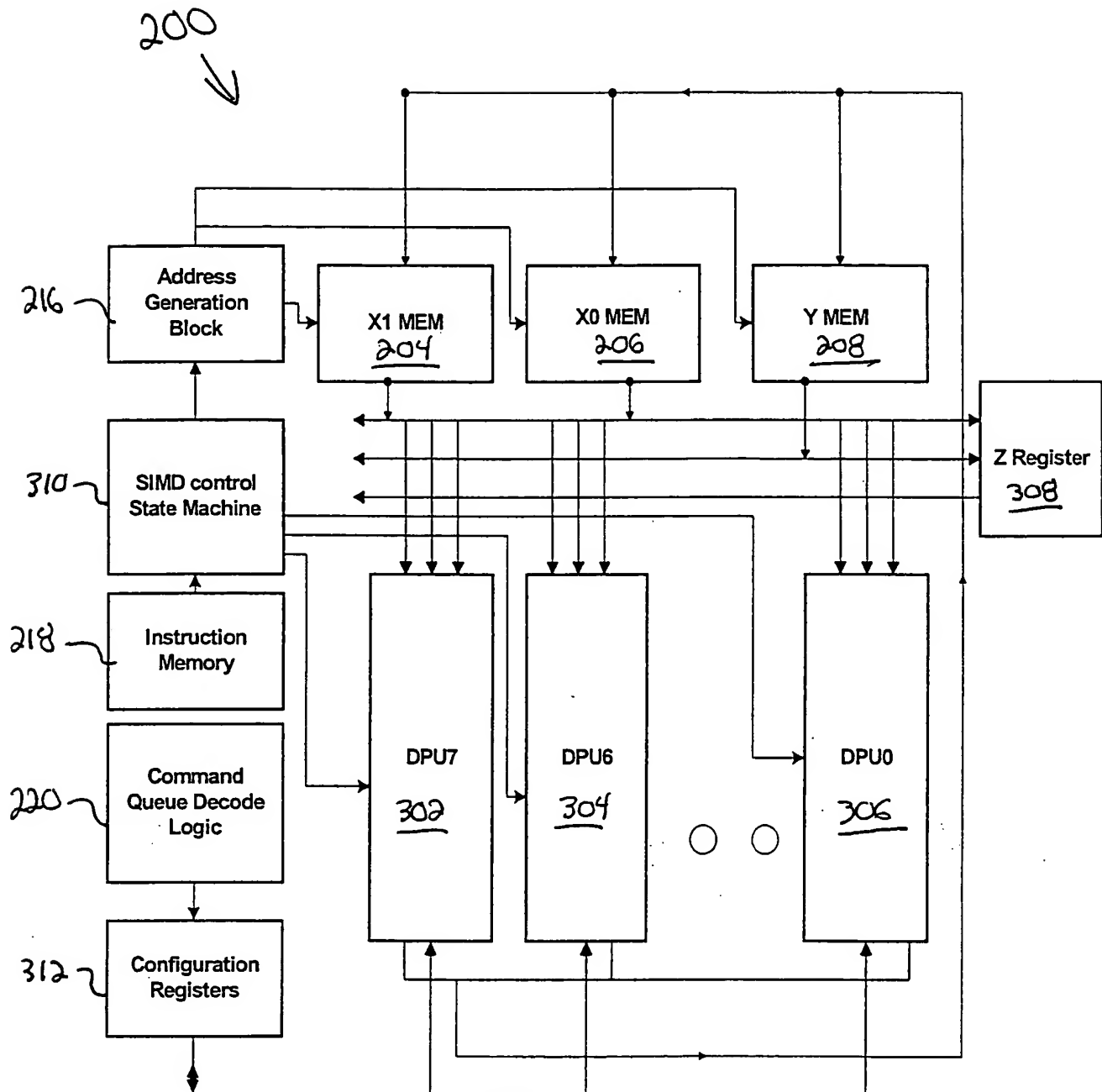


FIG. 3

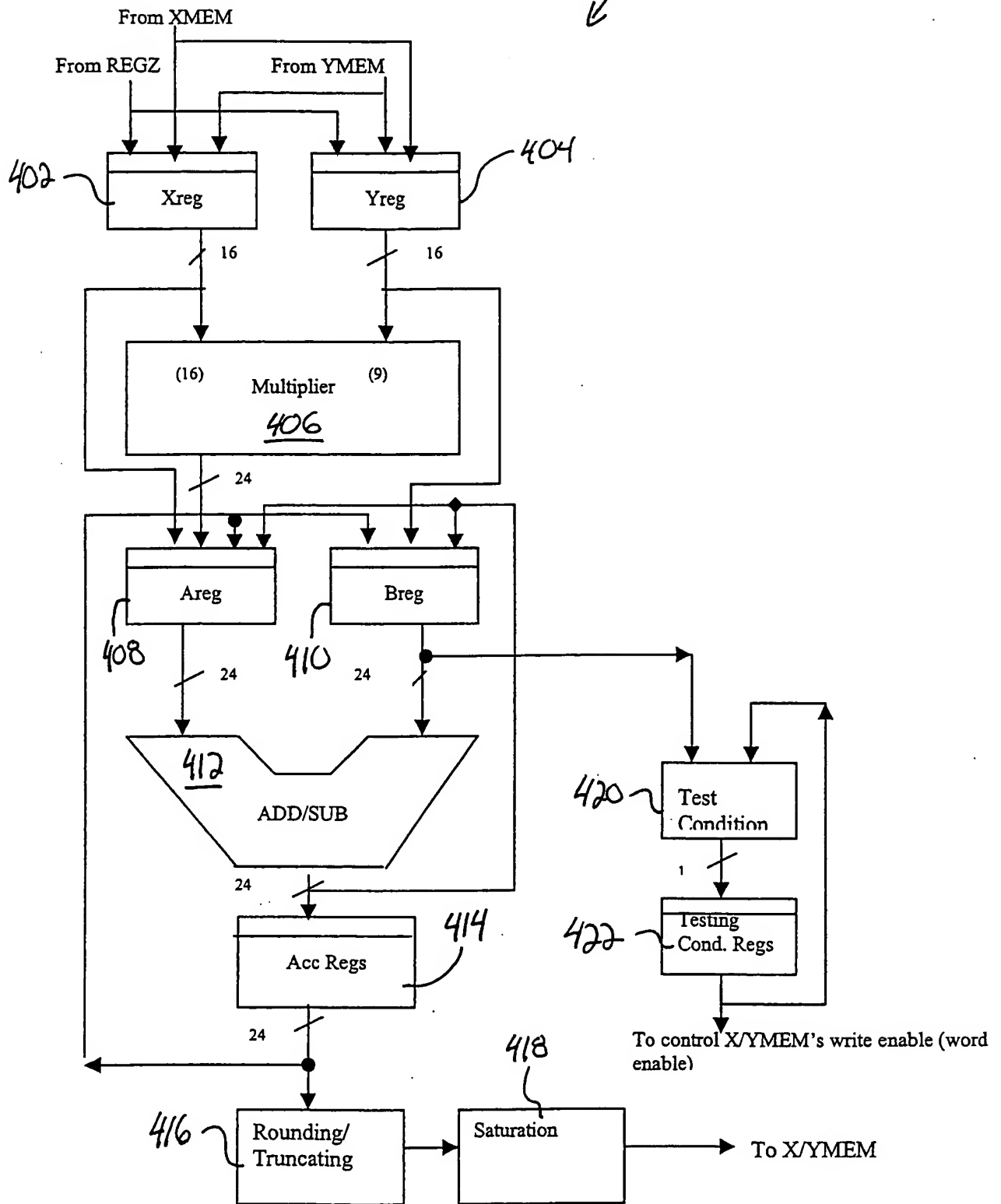


FIG. 4

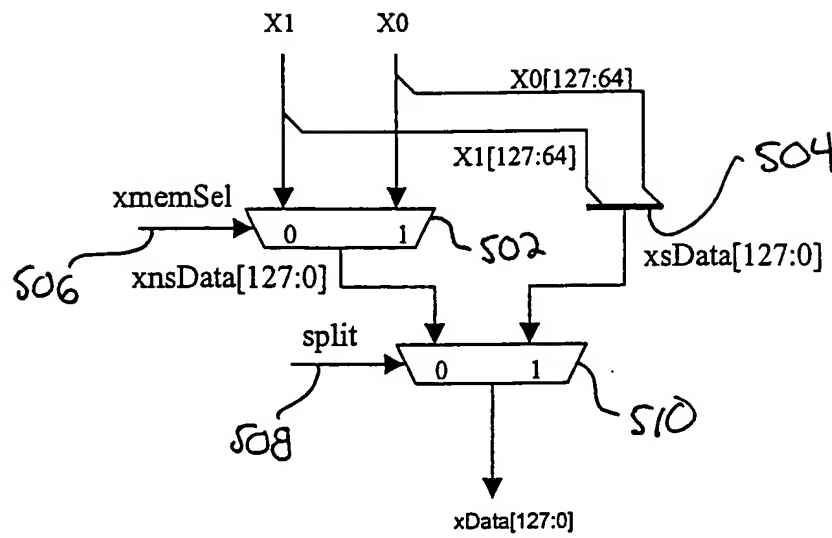


FIG. 5

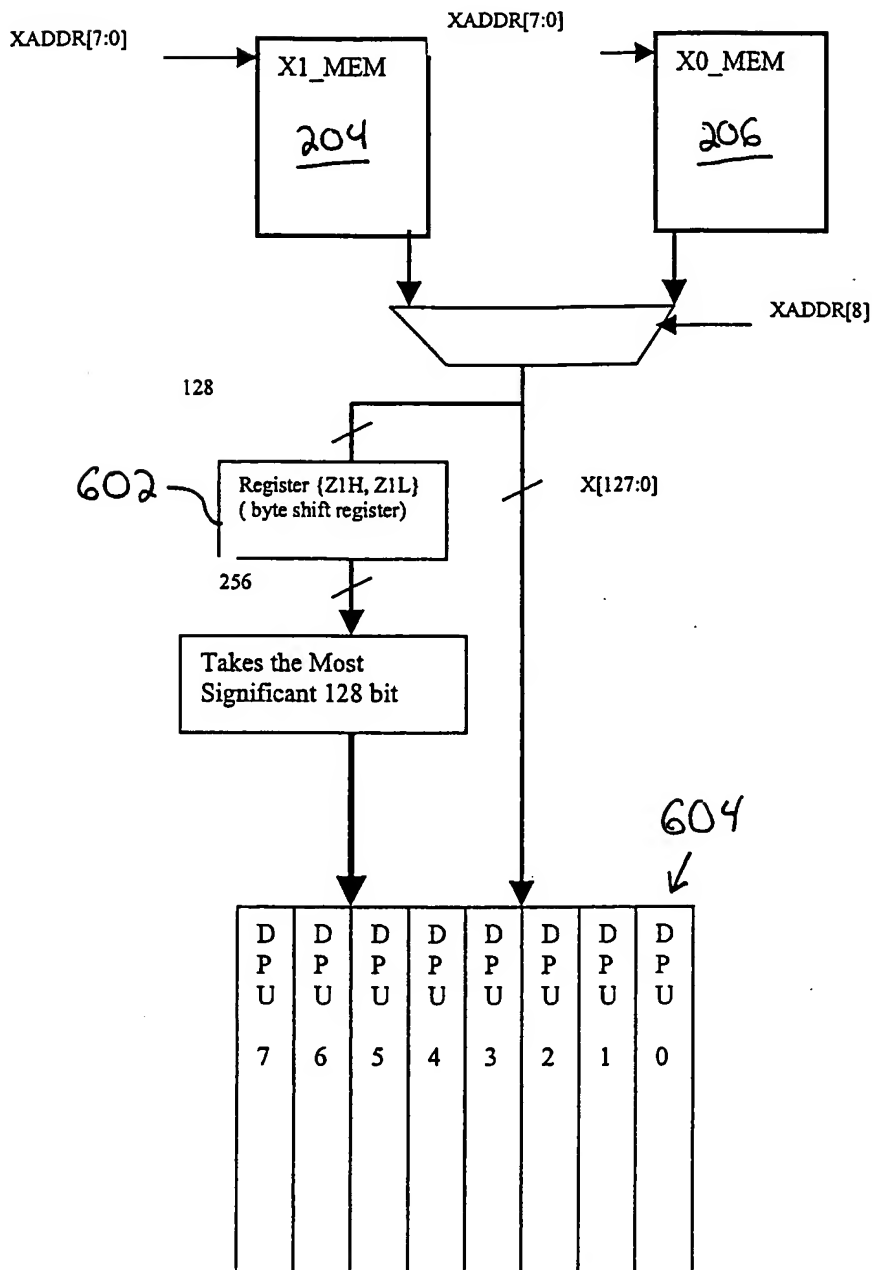


FIG. 6

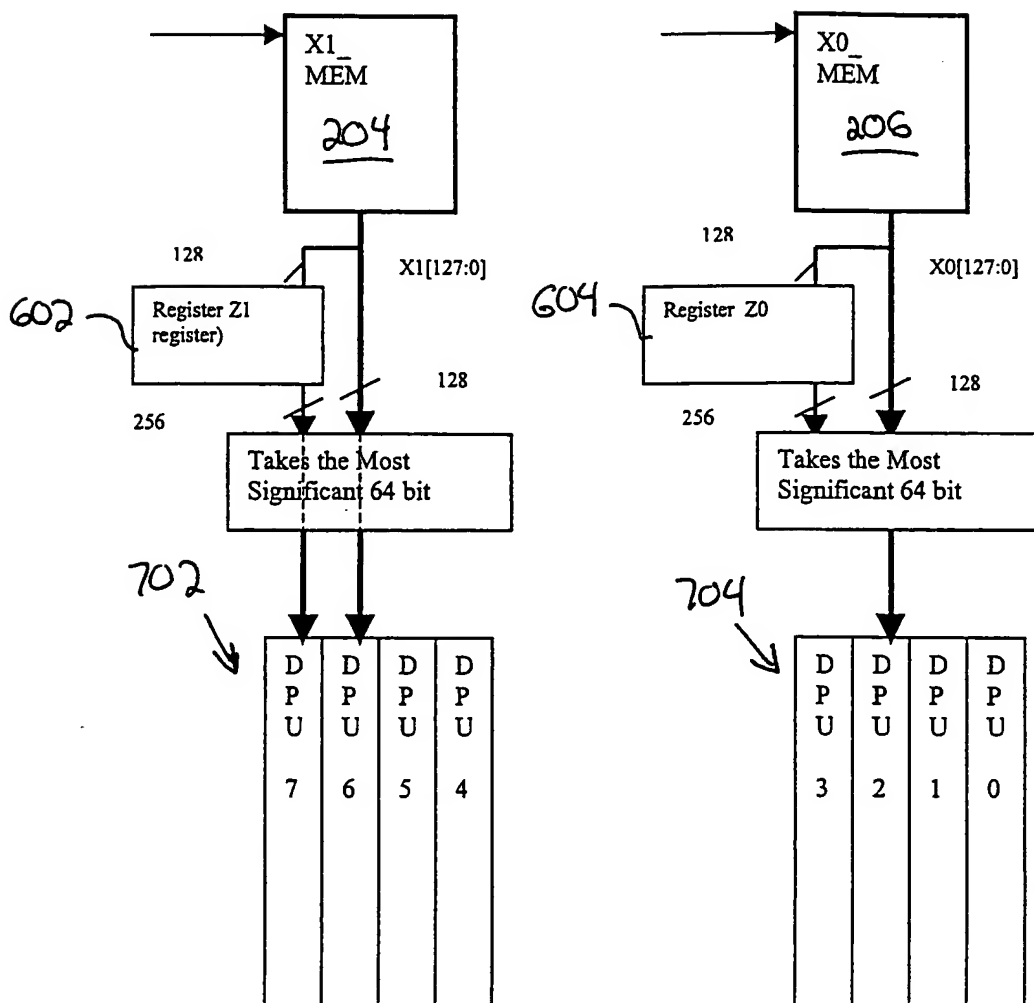


FIG. 7

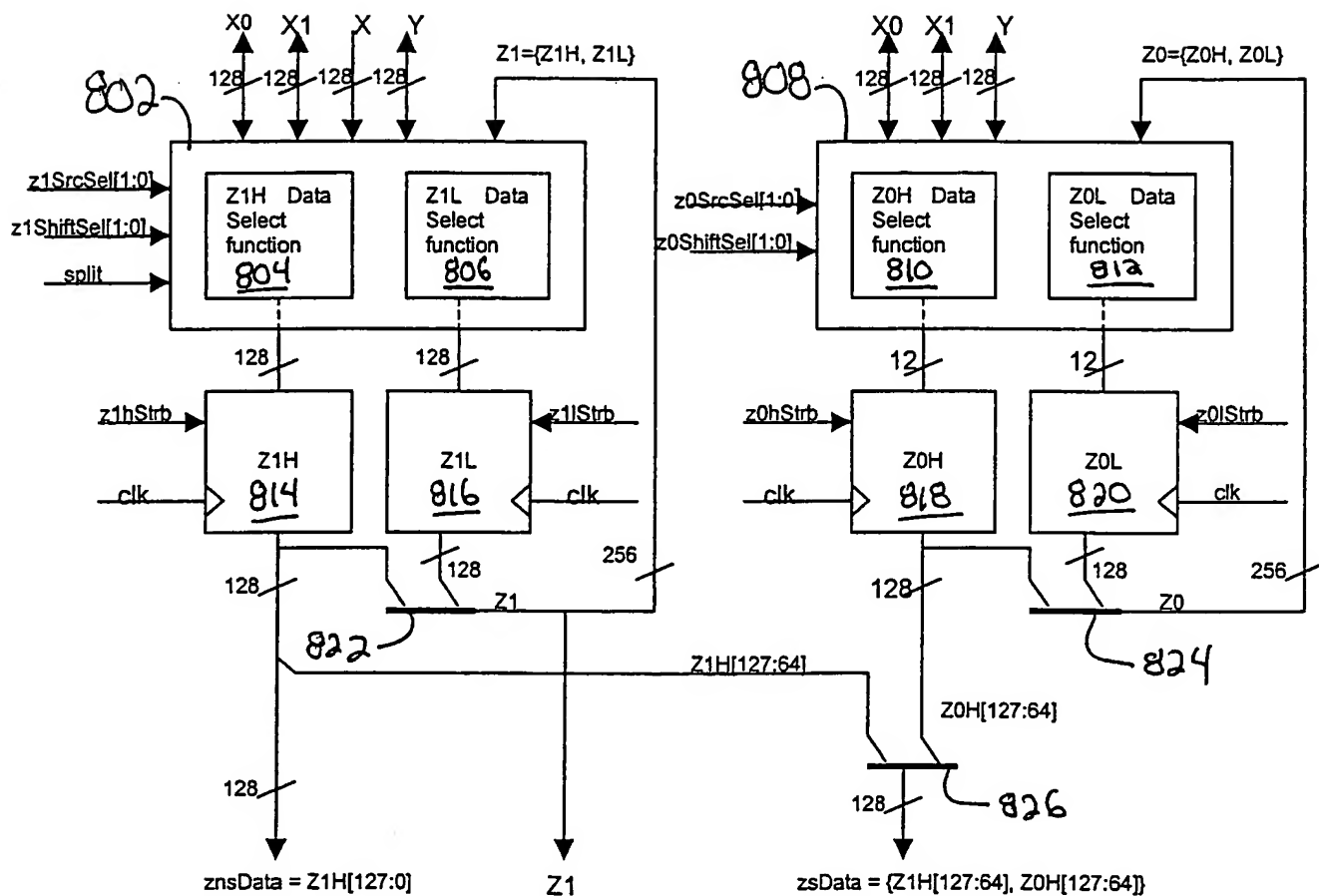


FIG. 8

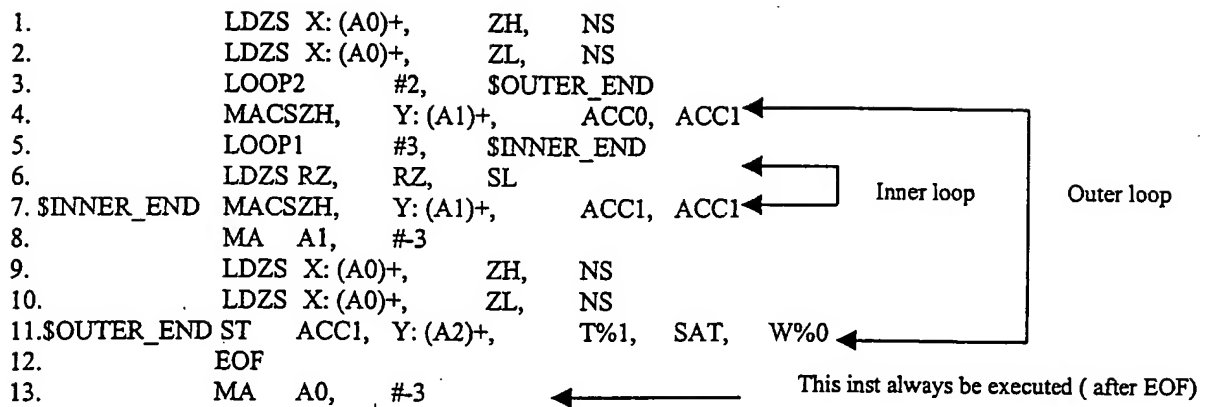


FIG. 9

clk1	clk2	clk3	clk4	clk5	clk6	clk7	clk8	clk9	clk10	clk11	clk12	clk13	clk14	clk15
LDZS	LDZS	LDZS	LDZS	LDZS										
	LDZS	LDZS	LDZS	LDZS	LDZS									
		Loop2	Loop2	Loop2	Loop2	Loop2								
			Macs	Macs	Macs	Macs	Macs							
				Loop1	Loop1	Loop1	Loop1	Loop1						
					LDZS	LDZS	LDZS	LDZS	LDZS					
						Macs	Macs	Macs	Macs	Macs				
							LDZS	LDZS	LDZS	LDZS	LDZS			
								Macs	Macs	Macs	Macs	Macs		
									LDZS	LDZS	LDZS	LDZS	LDZS	
										Macs	Macs	Macs	Macs	Macs

clk12	clk13	clk14	clk15	clk16	clk17	clk18	clk19	clk20	clk21	clk22	clk23	clk24	clk25	clk26
MA	MA	MA	MA	MA										
	LDZS	LDZS	LDZS	LDZS	LDZS									
		LDZS	LDZS	LDZS	LDZS	LDZS								
			ST	ST	ST	ST	ST							
				Macs	Macs	Macs	Macs	Macs						
					Loop1	Loop1	Loop1	Loop1	Loop1					
						LDZS	LDZS	LDZS	LDZS	LDZS				
							Macs	Macs	Macs	Macs	Macs			
								LDZS	LDZS	LDZS	LDZS	LDZS		
									Macs	Macs	Macs	Macs	Macs	
										LDZS	LDZS	LDZS	LDZS	LDZS

clk23	clk24	clk25	clk26	clk27	clk28	clk29	clk30	clk31	clk32	clk33	clk34
Macs	Macs	Macs	Macs	Macs							
	MA	MA	MA	MA	MA						
		LDZS	LDZS	LDZS	LDZS	LDZS					
			LDZS	LDZS	LDZS	LDZS	LDZS				
				ST	ST	ST	ST	ST			
					EOF	EOF	EOF	EOF	EOF		
						MA	MA	MA	MA	MA	
							INST	INST	INST	INST	INST

INST= (PC=0), if there is no executable function available in the queue;
 INST= the 1st inst of next executable function, if there is executable function available in the Que.

[note]: If the 1st cmd in the queue is "update A0 with "wait" option", the "update A0" command over write the previous MA's result.

FIG. 10